Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (previously presented) An isolated biopolymer marker peptide consisting of SEQ ID NO:2 diagnostic for insulin resistance.

Claim 2. (currently amended) A method for diagnosing insulin resistance comprising:

(a) obtaining a sample from a patient;

(b) conducting mass spectrometric analysis on said sample to elucidate peptide fragments contained therein; and

(c) comparing mass spectrum profiles of an isolated biopolymer marker peptide consisting of SEQ ID NO:2 to mass spectrum profiles of peptides elucidated from said sample; wherein recognition of a mass spectrum profile in the sample displaying the characteristic profile of the mass spectrum profile for the isolated biopolymer marker peptide consisting of ~~at about 1212 daltons for~~ SEQ ID NO:2 having a molecular weight of about 1212 daltons is diagnostic for insulin resistance.

Claim 3. (previously presented) The method of claim 2, wherein said sample is an unfractionated body fluid or a tissue sample.

Claim 4. (previously presented) The method of claim 2, wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 5. (previously presented) The method of claim 2, wherein said mass spectrometric analysis is selected from the group consisting of Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS), Matrix-Assisted Laser Desorption/ Quadrupole quadrupole Time-Of-Flight (MALDI-TOF) mass spectrometry, multiple sequential Mass Spectrometry (MS/MS), multiple sequential Time-Of-Flight/Time-Of-Flight (TOF-TOF) mass spectrometry, Electrospray Ionization/ Ionization Time-Of-Flight (ESI-Q-TOF) mass spectrometry and ION-TRAP mass spectrometry.

Claim 6. (previously presented) The method of claim 2, wherein said patient is a human.

Claim 7. (currently amended) An insulin resistance diagnostic kit comprising: (a) ~~an isolated~~ a biopolymer marker peptide consisting of SEQ ID NO:2 and (b) an antibody that binds to said ~~isolated~~ biopolymer marker peptide in a sample from a patient.

Claim 8. (previously presented) The insulin resistance diagnostic kit of claim 7, wherein said antibody is immobilized on a solid support.

Claim 9. (previously presented) The insulin resistance diagnostic kit of claim 7, wherein said antibody is labeled.